Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1 - 6. (**Canceled**)

7. (**Canceled**)

8. (**Currently Amended**) A method for increasing ~~an early~~ fruit number or fruit weight in a nonleguminous plant comprising the steps of applying to the plant a first dose of a lipochitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 1 ng to about 1000 ng per plant.

9. - 16. (**Canceled**)

17. (**Currently Amended**) The method of claim 8, wherein the nonleguminous plant is of the family ~~*Brassicaceae, Solonaceae, Chenopodiaceae, Asteraceae, Malvaceae, Cucurbitaceae,*~~ or *Poaceae*.

18. (**Previously Presented**) The method of claim 8, wherein the LCO is applied at a concentration of from about 10 ng per plant to about 100 ng per plant.

19. (**Currently Amended**) The method of claim 8, wherein the nonleguminous plant is a tomato plant, a pepper plant, or a ~~strawberry~~ corn plant.

20. (**Previously Presented**) The method of claim 18, wherein the LCO is applied at a concentration of from about 50 ng per plant to about 75 ng per plant.

21. (**Currently Amended**) A method for increasing ~~an early flower number~~biomass or yield in a ~~non~~leguminous plant comprising the steps of applying to the plant a first dose of a lipo-chitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 1 ng to about 1000 ng per plant.

22. (**Currently Amended**) The method of claim 21, wherein the ~~non~~leguminous plant is of the family *Fabaceae*~~*Brassicaceae, Solonaceae, Chenopodiaceae, Asteraceae, Malvaceae, Cucurbitaceae,* or *Poaceae*~~.

23. (**Previously Presented**) The method of claim 21, wherein the LCO is applied at a concentration of from about 10 ng per plant to about 100 ng per plant.

24. (**Currently Amended**) The method of claim 21, wherein the ~~non~~leguminous plant is a ~~tomato~~ soybean plant.

25. (**Canceled**)

26-27. (**Canceled**)

28-30. (**Canceled**)

31-33. (**Canceled**)

34. (**Currently Amended**) The method of claim 8, ~~wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO,~~ wherein the second dose is applied between about two weeks to about six weeks after the first dose.

35. (**Currently Amended**) The method of claim 21, ~~wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO,~~ wherein the second dose is applied at least three ~~about two~~ weeks after the first dose.

36. (**Currently Amended**) The method of claim 8, ~~comprising applying~~wherein the LCO is applied to the foliage of the plant.

37. (**Currently Amended**) The method of claim 21, ~~comprising applying~~wherein the LCO is applied to the foliage of the plant.

38. (**Canceled**)

39. (**Canceled**)

40. (**New**) A method for increasing fruit number, fruit weight, biomass, or yield in a tomato plant, pepper plant, or soybean plant comprising the steps of applying to the plant a first dose

of a lipochitooligosaccharide (LCO) at a concentration of from about 10 ng to about 100 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 10 ng to about 100 ng per plant, wherein the second dose is applied between about two weeks to about six weeks after the first dose.